Consortium of Social Science Associations

COSSA WASHINGTON UPDATE

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HOMELAND SECURITY: NAS REPORT, NEW DEPARTMENT FOCUS OF CONGRESSIONAL ACTIVITY

After months of resistance, President Bush has called for the creation of a Department of Homeland Security (DHS) that would transfer 22 agencies from around the government to focus on terrorist threats to the nation. (The current Office of Homeland Security would remain in the White House). Numerous congressional committees have taken up the challenge of completing legislation to establish the new department by the symbolic date of September 11. One issue that has arisen is the role of science and technology in the DHS.

To help Congress with this issue, the National Academies (of Science, Engineering, and the Institute of Medicine) have issued a report: *Making the Nation Safer: The Role of Science and Technology in Countering Terrorism* (available at www.nas.edu). The report was compiled by a committee chaired by Lewis Branscomb and Richard Klausner. Branscomb is emeritus professor of public policy at Harvard University's Kennedy School of Government and former chief scientist at IBM; Klausner is the executive director of global health programs at the Bill and Melinda Gates Foundation and a former National Cancer Institute director. Sociologist Neil Smelser of the University of California, Berkeley and economist Thomas Schelling of the University of Maryland served on the committee.

The report identifies key actions that the country can pursue now, based on already existing knowledge and technologies, as well as discussing key opportunities for reducing current and future risks through longer term research and development activities. The report discusses: nuclear and radiological threats; human and agricultural health systems; toxic chemicals and explosive materials; information technology; energy systems; transportation systems; cities and fixed infrastructure; and the response of people to terrorism. It also calls for analyses of "complex and interdependent systems" through the development of advanced threat and infrastructure models used in combination with intelligence data.

Recommendations Regarding People's Responses

In the section dealing with the response of people to terrorism, the report recommends a program of research to "understand how differences based on cultural background, experience with previous disasters, and other factors should be taken into account when systems are designed for preparedness, warning and response to terrorist attacks."

Reflecting on the public confusion during the anthrax episode, the committee also called for the identification and training of "appropriate and trusted spokespeople," who could provide "important, accurate, and trustworthy information clearly, quickly, and authoritatively." Furthermore, the committee recommended research on the structure and functioning of agencies responsible for dealing with attacks and other disasters.

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Finally, since the interface between technology and human behavior is an important subject for investigation, the committee notes, "all the agencies creating technological systems for the support of first responders should base their system designs and user interfaces on the most up-to-date research on human behavior."

In late August, the committee's Panel on Behavioral, Social, and Institutional Issues, chaired by Smelser, is expected to release two other reports dealing with the social/behavioral aspects of terrorists and terrorism.

House Science Committee Explores R&D in DHS

On June 25 and 27 the House Science Committee, chaired by Rep. Sherwood Boehlert (R-NY), held two hearings focused on research and development (R&D) in homeland security, with the second examining the proposed structure of the new department. Senator Ron Wyden (D-OR), chairman of the Commerce, Science, and Transportation's Science, Technology, and Space Subcommittee, joined the House members at the June 25 hearing.

The first hearing heard Klausner and Branscomb discuss the NAS report. They pushed the report's recommendation for a Homeland Security Institute to provide scientific and technological advice to the DHS. The Institute would be a private non-profit contractor-operated organization. It would, Klausner and Branscomb argued, provide a strong analytical capability to help DHS "make informed decisions and implement strategies that will work." Experts hired by the Institute, they noted, would provide analysis, simulation, and modeling to identify vulnerabilities and assess the effectiveness of steps taken to reduce them.

In his opening statement, Ranking Democrat Rep. Ralph Hall (D-TX) noted that in reacting to terrorist attacks it is important "to heal, to comfort, to grieve, and then go about the hard work of rebuilding lives and communities." Rep. Brian Baird (D-WA), reflecting this concern, raised with Klausner and Branscomb the need for further behavioral and social science research, particularly the capacity to respond quickly, so that researchers have access to survivors to focus on the psychological responses to terrorism. Branscomb responded positively and said there indeed was a need for social scientists to design systems that would assist people in the aftermath of disasters.

Structuring the New Department

At the June 27 hearing the focus was on the structure of the DHS. The witnesses included Presidential Science Adviser and Director of the Office of Science and Technology Policy (OSTP) John Marburger, Director of the Office of Science in the Department of Energy Raymond Orbach, and John Tritak, Director of the Critical Infrastructure Assurance Office at the National Institute of Standards and Technology.

In his prepared testimony, Marburger defended the President's proposed structure for DHS now embodied in H.R. 5005. In that bill, the Department's science and technology (S&T) component is located in the office of the Undersecretary for Chemical, Biological, Radiological and Nuclear Countermeasures. The mandate with regard to S&T is: 1) to conduct homeland security-related R&D, as well as to develop national policy for, and to coordinate federal efforts related to countering terrorist threats; and 2) to establish priorities for directing, funding, and conducting national research and development and procurement of technology and systems related to countering these weapons of mass destruction.

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The Consortium of Social Science Associations (COSSA), an advocacy organization for federal support for the social and behavioral sciences, was founded in 1981 and stands alone in Washington in representing the full range of social and behavioral sciences.

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The legislation would move programs from the Centers for Disease Control and Prevention and the bioterrorism research efforts at the National Institute of Allergic and Infections Diseases at the National Institutes of Health, as well as cybersecurity programs from the National Institute of Standards and Technology into DHS. These transfers have generated opposition from interest groups and their allies on Capitol Hill.

Chairman Boehlert, after noting the President's proposal was hastily prepared, declared his determination to amend the legislation to create an Undersecretary for Science and Technology in DHS. A separate office for S&T is contained in S. 2452, the Senate bill sponsored by Sen. Joseph Lieberman (D-CT), who was one of the first public proponents of a DHS. Boehlert proclaimed that H.R. 5005 "simply does not give R&D a high enough profile to enable the Department of Homeland Security to accomplish its goals."

Marburger: Social/Behavioral Science Research Key Component of Homeland Security

Reiterating his concern from the earlier hearing, Congressman Baird picked up the issue of behavioral/social science research on terrorism with Marburger. Baird noted that "the aim of terrorism is to inflict lasting psychological wounds on its victims." He declared that "it is critically important to include funding for research on how people cope with such tragedies and provide tools to help repair the psychological impact to our citiziens as part of any national homeland defense strategy." He cited the American Psychological Association's Rapid Response Network as helping to provide research-based interventions in disaster settings. Rep. Mike Honda (D-CA) also noted the importance of human factors research in aviation security measures.

Responding to Baird, Marburger again declared the importance of the behavioral and social sciences as a component of the response to terrorism and the need to ensure that it is part of the research mission of the DHS. He suggested every area of concern, whether it is health, transportation, or even energy, has a social science component to it. He pointed to the inter-agency group of the OSTP Antiterrorism Task Force that focuses on social, behavioral, and educational issues. That group is chaired by Norman Bradburn, Assistant Director for the National Science Foundation's (NSF) Social Behavioral and Economics Directorate, and Raynard Kington, head of NIH's Office of Behavioral and Social Sciences Research and currently Acting Director of the National Institute for Alcohol Abuse and Alcoholism. James Griffin, OSTP's Assistant Director for Social, Behavioral and Educational Sciences, is also a co-chair.

The House of Representatives has appointed a select committee headed by Majority Leader Dick Armey (R-TX) to produce the House version of the legislation creating the Department. The regular committees of the House are supposed to provide input to the select committee by July 12. The Senate Governmental Affairs Committee, chaired by Lieberman, has already reported out S. 2452, but a newer version reflecting some of the President's proposals, will come before the Senate by the end of July. Although on a fast track, the legislation and the new Department raise a number of R&D related issues – role of existing research agencies such as NSF, role of a coordinating agency such as OSTP – that still need further discussion.

APPOINTMENTS

Gerberding Named CDC Director

On July 3 Secretary of Health and Human Services Tommy Thompson announced the appointment of infectious disease expert Julie Gerberding as Director of the Centers for Disease Control and Prevention (CDC) and Administrator for the Agency for Toxic Substances and Disease Registry. She replaces Jeffrey Koplan, who retired in March. The appointments do not require Senate confirmation and take effect immediately.

Gerberding had been one member of a four-person term leading the CDC in the interim following Koplan's departure, serving as Acting Principal Deputy Director of the agency. (See *Update*, April 15, 2002). She joined the CDC in 1998 as Director of the Division of Healthcare Quality Promotion. She also served as Acting Deputy Director of the National Center for Infectious Diseases before joining the interim leadership team.

Gerberding earned a B.A. in Chemistry and Biology and M.D. degree at Case Western Reserve

University. She received her MPH at the University of California, Berkley. For a number of years, Gerberding held hospital positions in San Francisco. She becomes the first female director of the CDC.

Feuer Replaces Torrey as Head Of Academy Social Science Division

The National Academies (NAS) has announced that Michael Feuer is the new Executive Director of the Division of Behavioral and Social Sciences and Education (DBASSE). He replaces Barbara Torrey, who has become a visiting scholar at the Population Reference Bureau after nine years as head of DBASSE.

Feuer has been at the National Academies since 1993. He first joined the NAS staff as head of the Board on Testing and Assessment (BOTA), which conducted studies and conferences on educational, employment, and psychological testing. In 1999 BOTA merged with the Center for Science, Mathematics, and Engineering Education, which was then renamed the Center for Education. Since the National Research Council reorganization a few years ago, Feuer has also been a Deputy Executive Director of DBASSE.

Before coming to the National Academies, Feuer was a Senior Analyst and Project Director at the Office of Technology Assessment (OTA). Prior to his tenure at OTA, he was a professor of management and organizational sciences at Drexel University. He has taught public policy, organization theory, education, and calculus for social scientists. Feuer has published in economics, business, management, and education journals, and has had dozens of reviews and essays in the New York Times, Philadelphia Inquirer, and other popular media.

Feuer has a B.A. in English and Journalism from Queens College of the City University of New York, an M.A. from the Wharton School at the University of Pennsylvania, and a Ph.D. in Public Policy also from the University of Pennsylvania.

COSSA BRIEFS WASHINGTON ON THE GENETIC REVOLUTION

On June 7, COSSA held its second congressional briefing of the year. The session, entitled *The Genetic Revolution and the Meaning of Life: How Will Society Respond to the Explosion of Knowledge?*, focused on the ethical, legal, and social questions posed as a result of advances in health and genetics research.

The Interplay of Genetic Advances and Race

Troy Duster, Professor of Sociology at New York University (NYU) and Director of the American Cultures Center and Chancellor's Professor at the University of California, Berkeley, discussed the role race and ethnicity have played in health research funding policy as genetic knowledge has advanced. He explained that throughout much of the 20th Century, public consensus existed to fund research on the diseases that had the most widespread impact on the human population. These included smallpox, tuberculosis, and cholera. Genetic advances in the later part of the century, however, changed the way segments of the public viewed funding decisions.

As research made us aware that varied "gene disorders (occur) at different frequencies in different prime populations," ethnic groups began forming coalitions to support research efforts on 'their' diseases. As a result, NIH funding is now allotted in many cases at rates disproportionate to the frequency of a given disease in the overall population. Some of these constituencies, Duster noted, have been extremely successful in their efforts while others have failed to gain much political traction. These racial disparities have also carried over to the field of pharmacogenomics, as the Food and Drug Administration has recently approved the first drugs aimed at helping individuals from specified ethnic groups.

Duster next turned his focus to criminal justice policy and genetic profiling. He explained that in Great Britain scientific papers have been presented calling on the police to use DNA evidence to identify the most likely ethnicity of assailants. This would potentially allow the authorities to narrow any existing suspect list for a crime. And in New York City, former Mayor Rudolph Giuliani and former Police Commissioner Howard Safir proposed taking

a DNA sample every time an officer stopped somebody on the streets. This sample would be compared to the Police Department's computer database of all entered DNA samples to identify matches. Duster explained that this would be highly problematic because of racial profiling issues and the disproportionate rates at which individuals of certain races are stopped. He also noted that former U.S. Attorney General Janet Reno put a stop to the plan and asked the city to create a task force to study the matter.

Social and Legal Problems Created by Genetic Advances

Dorothy Nelkin, Professor of Law and Sociology at NYU addressed *Emerging Legal and Social Issues in the Genetic Age.* She began by explaining that there has been a great proliferation in the number of publicly and privately held genetic and tissue banks. As tests that predict future disease become more common, insurers, employers, and a wide array of varied social institutions will seek access to these repositories for information about their prospective clients and employees. "Questions of access to these data and their confidentiality will be increasingly important in future years and they have not been resolved although they pose unprecedented threats to personal privacy," noted Nelkin.

Another major issue presented by genetic research is the conflict between presenting findings to assist the common good versus maintaining secrecy to win extremely valuable patents. Nelkin explained that studies have found "that scientists delay publication of research results in order to protect financial interests and that those with access to biological materials are less likely to share them when patents are at stake." In addition, universities have, in many cases, changed their data sharing policies to protect licensing rights. This trend could easily delay the development of vital treatments for a wide range of diseases.

Cultural Variation in Medical Beliefs

Susan Weller, Professor of Sociomedical Sciences at the University of Texas Medical Branch, opened her presentation by explaining that her research is focused on understanding to what extent individuals have the same or similar beliefs in different segments of society. To test this question, she collaborated with a team of researchers to measure AIDS knowledge of Latino populations in four diverse areas: Hartford, Connecticut; Edinburgh, Texas; Guadalajara, Mexico; and the Pacific Coast of Guatemala.

The study found that the responses in Connecticut featured the highest rate of homogeneity in responses (.72), followed by Texas (.62), Mexico (.55), and Guatemala (.48). Weller pointed out that homogeneity increased as prevalence of AIDS in the population also increased. The study also found that agreement was highest between those samples sharing geographic proximity; the Connecticut and Guatemala responses featured the lowest level of agreement (63% of the items, compared to 77% for Mexico and Guatemala or 76% for Connecticut and Texas). Weller concluded by noting that responses in all four sites were in line with biomedical assumptions about the disease and that variation in responses was more characteristic of less information rather than different beliefs.

COSSA will prepare edited transcripts of the seminar, which included a question and answer period. These should be available by the end of the summer. If you would like a copy, please e-mail cossa@cossa.org.

SOCIAL AND BEHAVIORAL DEVELOPMENT THROUGH EARLY HEAD START

On June 28 the American Psychological Association and the Society for Research in Child Development co-sponsored with two other groups a Congressional briefing entitled *Improving Outcomes for Young Children: The Early Head Start Impact Study.* The event was held under the guise of the Decade of Behavior, a multidisciplinary initiative stretching from 2000-2010 to focus the talents, energy, and creativity of the social and behavioral sciences on meeting many of society's most significant challenges. (See *Update*, October 9, 2000).

The event opened with remarks from Windy Hill, Associate Commissioner of the Head Start Bureau, which falls under the Administration for Children and Families at the U.S. Department of Health and Human Services. Hill emphasized that Early Head Start (EHS) can act as a vehicle for the social and behavioral development of children and

families, noting that EHS "is a two generation program designed to provide high quality child and family development services to low income pregnant women and families with infants and toddlers." She also stressed the role the program plays in ensuring America's children are adequately prepared, socially and behaviorally, to matriculate into society.

Research Results and Evaluation

Early Head Start was first tested in an impact study involving 3,000 children and families in 17 locations. These sites were chosen as being representative of the first 143 EHS programs, which were launched in 1995-96. Evaluation was conducted jointly by Mathematica Policy Research, Inc. and Columbia University's Center for Children and Families.

John Love of Mathematica told the audience that study results were derived through several mediums: parent interviews, observation of parent-child interactions, and data collected when the children were six, 15, and 26 months past enrollment into the program. Based on these measures, Love asserted that "three year old Early Head Start children performed significantly better on a range of measures of cognitive, language, and social-emotional development than a randomly assigned control group." Moreover, he noted that the program also affected behavioral changes in mothers and fathers. Parents started to become more self-sufficient after enrolling in the program because they experienced reductions in subsequent births, made improvements in the home environment, and modified parenting behavior.

Ellen Kisker, also of Mathematica, reported the key findings from the impact study. Two of the most significant effects on the children were improved cognitive functioning and a larger receptive vocabulary. According to Kisker, "when children were age three, program children scored 91.4 on the Bayley Mental Development Index compared with 89.9 for control group children, and they (Early Head Start children) scored 83.3 on the Peabody Picture Vocabulary Test, compared to 81.1 for the control group." Although these differences appear small, they are statistically significant.

She explained that these outcomes were the direct effect of higher levels of parental involvement and parent supportiveness resulting from EHS. Kisker noted that the program forges a positive relationship between both children and parents. The evaluation showed that children were more attentive to and less aggressive toward parents. In turn, parents experience a reduced sense of detachment from the child and developed more positive discipline strategies.

The Head Start Bureau website is www2.acf.dhhs.gov/programs/hsb/. The Decade of Behavior is online at www.decadeofbehavior.org.

'REDUCING SUICIDE: A NATIONAL IMPERATIVE' SAYS IOM

According to a June 17 Institute of Medicine report, *Reducing Suicide: A National Imperative*, there is a need for an integrated understanding of the influence of the biological, psychological, social, and cultural risk factors for suicide. The report, released by the Board on Neuroscience and Behavioral Health, states that approximately 30,000 individuals die by suicide in the United States annually. Worldwide, the number of deaths as a result of suicide increases to one million. Another 650,000 individuals receive emergency treatment after attempting suicide in the U.S. each year.

Suicide is the third leading cause of death among American young people and among the top 12 for Americans of all ages. For white males over 75 years of age, Native Americans, and certain professions, including dentists, the rates are "exceptionally high." Among young African-American males the rates are rising.

Reducing Suicide stresses that while more than 90 percent of the suicides in the U.S. are associated with mental illness and/or alcohol and substance abuse, as many as ten percent of the people who commit suicide do not have any known psychiatric diagnosis. The report also points out that more than "95 percent of those with mental disorders do not complete suicide."

The report examines what is known about the epidemiology, risk factors, and interventions for suicide and suicide attempts; describes the psychiatric and psychological factors contributing to risk of suicide; explores the biological changes associated with suicide; reviews the links between childhood trauma and suicide; examines the impact

of societal and cultural influences; explores the medical and psychosocial interventions for suicide; looks at programs for suicide prevention; explores barriers to treatment and research; and presents overarching recommendations for new directions.

The text notes that "[a]t both the individual and collective levels, the suicide rate has long been understood to correlate with cultural, social, political, and economic forces." It carries a social and moral meaning in all societies. It is further noted that "a society's perception of suicide, or its stigma, can influence its rate, preventing suicide in those societies and social groups where it is frowned upon but increasing suicide where it is a culturally acceptable option in certain situations."

Treatment: Medications Insufficient

Medications alone, according to the IOM report, are insufficient in treating mental disorders or suicidality. Nor are treatments equally effective across individuals and diagnoses. Further, there are significant barriers to receiving effective mental health treatment; approximately two-thirds of the individuals with diagnosable mental disorders do not receive treatment, the report states.

Critical Barriers to Prevention

The lack of longitudinal and prospective studies are a critical barrier to understanding and preventing suicide. *Reducing Suicide* emphasizes that to effectively study suicide in a large population base, better reporting of completed and attempted suicide, careful control and analysis of risk and protective factors, common databases, and banks of biological tissues for analysis are required.

Report Recommendations

In recognition of the current funding and research shortage in the area of suicide, the committee made a number of recommendations for establishing population centers that will integrate the talents of experts from the various disciplines and will draw upon a large population base with continuity over a long duration. The recommendations include:

Rec. 1: The National Institute of Mental Health (NIMH) (in collaboration with other agencies) should develop and support a national network of suicide research Population Laboratories devoted to interdisciplinary research on suicide and suicide prevention across the life cycle.

Rec. 2: National monitoring of suicide and suicidality should be improved. Funding agencies should encourage that measures of suicidality be included in all large and/or long-term studies of health behaviors, mental health interventions, and genetic studies of mental disorder. A national suicide attempt surveillance system should be developed and coordinated through the Centers for Disease Control and Prevention (CDC).

Rec. 3: Because primary care providers are often the first and only medical contact of suicidal patients, tools for recognition and screening of patients should be developed and disseminated.

Rec. 4: Programs for suicide prevention should be developed, tested, expanded, and implemented through funding from appropriate agencies including NIMH, the Department of Veterans Affairs, CDC, and the Substance Abuse and Mental Health Services Administration.

For more information see www.nap.edu/books/0309083214/html.

COSSA WELCOMES BACK CONTRIBUTOR

COSSA is pleased to announce that the University of Georgia has rejoined the Consortium as a Contributor. Georgia originally belonged to COSSA from 1989-1999. We look forward to working with the University on issues of interest to its social and behavioral scientists.

Correction: A source of research support featured in our June 24 issue, *Department of Health and Human Services, Assistant Secretary for Planning and Evaluation*, listed an incorrect website address. For more information on the source, please visit:

http://www.aspe.dhhs.gov/funding

We apologize for any confusion this may have caused.